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## HIGH VOLTAGE MOS DEVICES WITH HIGH GATED-DIODE BREAKDOWN VOLTAGE AND PUNCH-THROUGH VOLTAGE

### ABSTRACT OF THE DISCLOSURE

A method of fabricating CMOS devices suitable for  
5 high voltage and low voltage applications, while maintaining  
minimum channel lengths for the devices. In one embodiment,  
pocket implants (310) are formed in a minimum channel device  
causing a reverse channel effect. The reverse channel effect  
is optimized for the minimum channel length of the device.  
10 Field implants (120), enhancement implants (130), and wells  
(140) are all formed using a single mask.

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